IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

WILLIAM C. BRAMAN, MARK MENDELSON, and JOHN SIMMS, Individually and On Behalf of All Others Similarly Situated,	)	**<u>SECOND AMENDED CLASS ACTION COMPLAINT</u>**
Plaintiffs,	)	
v.	)	**Case No. 14-cv-02646**
THE CME GROUP, INC., THE BOARD OF TRADE OF THE CITY OF CHICAGO, THE CME EXCHANGE, INC., TERRENCE A. DUFFY, PHUPINDER GILL, BRYAN T. DURKIN and ANITA LISKEY,	)	
Defendants.	)	**JURY TRIAL DEMANDED**

Plaintiffs William Charles Braman, Mark Mendelson and John Simms ("Plaintiffs"), individually and on behalf of all others similarly situated, by their undersigned attorneys, for their Complaint against the above-named defendants ("Defendants"), upon knowledge as to matters relating to themselves and upon information and belief as to all other matters allege as follows:

SUMMARY OF THE COMPLAINT

1) The United States derivatives markets have historically been the envy of the world, serving a vital public function of providing price discovery and risk transfer while being a global center for derivatives trading. The integrity of the derivatives markets is a core national interest that serves a vital role to the United States economy. Over the past decade, the Chicago derivatives markets have engaged in agreements with certain high frequency trading firms to erode the integrity of the marketplace and manipulate prices. These exchanges, together with a sophisticated class of technology-driven entities known commonly as "high frequency traders" (the "HFTs"),[1] have provided and utilized information asymmetry along with clandestine incentive agreements and illegal trading

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[1] "HFT" or "HFTs" is commonly used to refer one or more high frequency trading firms, as well as being used more generically to refer to high frequency trading in general. In its generic sense, HFT has been defined by the United States Commodity Futures Trading Commission's Technology Advisory Committee as a type of automated trading that uses:

> "algorithms for decision making, order initiation, generation, routing, or execution, for each individual transaction without human direction; low latency response times including proximity and co-location services; high speed connections to markets for order entry; and recurring high message rates (orders, quotes or cancellations)."

Among the objective measures for distinguishing a HFT from a regular automated trading system is the existence of three characteristics: 1) high cancel to fill ratios; 2) participant-to-market message ratios; and 3) participant-to-market trade volume ratios. Concept Release on Risk Controls and System Safeguards for Automated Trading Environments, 78 Fed. Reg. 56542, 56,545 (Sept. 12, 2013).

practices to create a two-tiered marketplace that disadvantages the American public and all other futures marketplace participants, all the while continuing to represent to the public and their regulators that they continue to provide transparent and fair trading markets to the global market. In reality, the advantages given to HFTs by the Exchange Defendants effectively create a "zero sum" trading scenario where the HFTs gain what the Class Members lose by effectively providing HFTs with the opportunity to skim an improper profit on every futures transaction.

NATURE OF THE ACTION

2) This class action is brought on behalf of public investors (the "Plaintiff Class" or "Class") who purchased and/or sold futures contracts in the United States that are listed on the Chicago Board of Trade ("CBOT") and the Chicago Mercantile Exchange ("CME") and/or used real-time futures market data purchased from the CBOT, the CME, and/or the CME Group, Inc. ("CME Group") (hereinafter collectively the "Exchange Defendants") between January 1, 2005 and April 10, 2014 (the "Class Period") and who suffered trading and other financial losses caused by the illegal and manipulative high frequency and high volume trading methods of the HFTs, which methods were made possible by the active collusion and support of the Exchange Defendants and certain individual employees of Defendant CME Group named herein (the "Individual Defendants," and together with the Exchange Defendants, the "Defendants"), all in violation of the Commodity Exchange Act ("CEA"), the Rules and Regulations of the Commodity Futures Trading Commission ("CFTC"), and the federal antitrust laws, 15 U.S.C.§§1 *et seq*.

3) The CBOT and CME are contract markets registered with the Commodity Futures Trading Commission ("CFTC"). They are required pursuant to 7 U.S.C. § 7(d)(2) to

regulate themselves in conformity with the CEA and all regulations enacted by the CFTC, including what are termed "Core Principles," such as the Prevention of Market Disruption, the Protection of Markets and Market Participants, and the listing of Contracts Not Readily Subject to Manipulation. Accordingly, the CME and CBOT are required to operate in accordance with the strictures of the CEA, in addition to obeying prohibitions against anticompetitive and other wrongful behavior in restraint of trade as provided for under the federal antitrust laws, 15 U.S.C.§§1 *et seq*.

4) Sometime after January 1, 2005, the Exchange Defendants began to allow certain HFTs to use an exploitable structural advantage known only to Defendants that existed at the CME called the Latency Loophole, which advantage, when coupled with receiving price information faster than all the Exchange Defendants' other customers, would allow these select firms to exploit the order flow of all the other customers and users of the Exchange Defendants' trading markets. Defendants did not however, apprise the Class Members of this improper preferential trading advantage.

5) Sometime after the commencement of the Class Period, the Exchange Defendants began to allow HFTs to enter and/or execute orders to buy and sell futures contracts based upon the non-public price information belonging to all non-HFTs. The Exchange Defendants allowed the HFTs an exclusive position by which to profit from peeking at everyone else's orders and price data and to act on this price and order information. All as alleged in detail herein, part of this exclusive position was giving these HFTs the ability to use the Latency Loophole, direct market access ("DMA"), the ability to enter orders without a clearing stop or risk check, the ability to use wash trades, engage in spoofing activities and baiting all other customer orders. Furthermore, the Exchange

Defendants provided the HFTs with reduced or waived commissions, while allowing the HFTs to employ all of the aforementioned strategies and structural preferences.

6) The Exchange Defendants invited Class Members to trade in their markets, charging them fees for doing so and for seeing what they billed as "real-time" data, while at the same time not revealing any of the preferential arrangements that they made with selected HFTs. Without ever informing Class Members or obtaining their permission, the Exchange Defendants then provided Class Members' order information and trading activities as fodder for the Exchange Defendants' preferred market participants to exploit.

7) The Latency Loophole advantage, the incentive/rebate commission structure and other special preferments as alleged herein that were provided to certain HFTs would not have caused the extent of market losses suffered by Class Members without the active collusion of the Exchange Defendants to keep such preferred arrangements with certain HFTs secret from Class Members. The Exchange Defendants charged both classes of market participants and profited from both, realizing full well that they were cannibalizing an entire industry of independent traders, professional traders and institutions who had relied on their trading markets and trusted in the integrity of these markets, yet unknowing of all the structural fraudulent artifices Defendants had constructed and deployed.

8) At all relevant times, the CBOT and the CME together comprised the world's largest derivatives exchange, handling three billion contracts worth approximately $1 quadrillion annually (on average) and provided what it labeled as real-time price data information on United States debt instruments, agricultural products, energy, equity indexes, foreign exchange rates and metals to the entire financial world. The CBOT and

CME charged exchange fees and data-fees for this real-time price data to market users and the world's financial marketplace while falsely maintaining that the data sold was in real-time. The purchasers of real-time price data/information were led to believe by the Exchange Defendants that they were the first people to see the price data. In other words, Defendants represented that those who paid for the data were getting it in "real-time."

9) Throughout the Class Period, the Exchange Defendants charged trading/clearing fees and exchange fees for clearing and trading exchange products, and held themselves out to the world as providing real-time and *bona fide* market data, when in reality throughout this same period, Defendants also profited from side agreements with certain HFTs giving these firms the ability to see price data and unexecuted order information before anyone else in the financial world, including all the people who had paid and who continue to pay Defendants for seeing the same data first, in real-time.

10) Throughout the Class Period, Defendants not only permitted the HFTs to see price and market data before all other market participants and traders saw the same price and market data, but they also permitted the HFTs to execute trades using this same non-public data and order information before all other traders and market participants. This practice was made possible because of the CME's Latency Loophole, the existence of which was first revealed to the public by the journalist Scott Patterson.[2] Instead of

[2] The CME allowed and continues to allow certain HFT firms with direct market access (DMA) to its computers (*see* fn. 15 herein for the CFR definition of DMA) to use their technology to get confirmations of trades they have made, up to milliseconds before the rest of the trading world or public knows that these HFT trades were made. While a millisecond is one thousandth of a second and undetectable to humans, it is 1,000 microseconds-this time period represents an eternity in the HFT ecosystem where trades are made in less than 10 microseconds. The rest of the trading public only knows about these trades when they are reflected in the CME's Market Data screen. The gap in time between when a HFT with DMA can see that it made a trade and at what price and when the rest of the world is made aware of this trade, is called the latency gap

immediately making public the existence of this Latency Loophole when first discovered, the Exchange Defendants remained silent and instead treated such Latency Loophole as a structural market advantage that could be sold to certain market participants by the CME in the same manner as a co-location fee, thereby enhancing CME revenues. Before Scott Patterson's article that appeared in the *Wall Street Journal* on May 1, 2013, the Latency Loophole was known only to selected market participants/insiders and the CME.

11) The CME also provided some HFT firms a further advantage by entering into clandestine contracts or incentive agreements with them that allow these firms to trade at rates that are non-published and in some instances *gratis*. As part of some of these incentive agreements the CME Group pays rebates to certain firms to trade in established and otherwise heavily traded contract markets-sometimes for free.[3] The rest of the trading public pays the CME and CBOT fees per transaction and are not made aware that they are trading against firms that may even trade continuously and pursuant to secret terms that are part of clandestine agreements in established markets.

12) During the Class Period, the Exchange Defendants have also been well aware of existing market conditions wherein fraud is used to manipulate the market, and the Exchange Defendants have allowed and in many instances encouraged such wrongful trading practices to continue in violation of section 4c(a)(5) of the CEA and CFTC Regulation 180.1. Specifically, as further alleged herein, the Exchange Defendants have

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or Latency Loophole. The existence of the Latency Loophole was first revealed to the public in an article by Scott Patterson, Jenny Strasburg and Liam Pleven (WSJ May 1, 2013), http://online.wsj.com/news/articles/SB10001424127887323798104578455032466082920.

[3] http://www.cmegroup.com/market-regulation/files/13-482R.pdf

given certain HFTs advantages in the form of the Latency Loophole and incentive agreements, and they have concealed such advantages from the rest of trading world and the public. These advantages are conditions precedent for the occurrence of disruptive and illegal trading practices such as the wide spread use and allowance of wash trades, baiting and the practice of spoofing, which together create false impressions to other traders about supply and demand in the marketplace and impending price movements. These are prohibited trading practices that disrupt normal supply and demand in the futures markets that would have naturally existed but for the presence of activities prohibited by the CEA and the CFTC as well as the federal antitrust laws.[4]

13) Plaintiffs bring this class action under the CEA and the federal antitrust laws, seeking recovery of damages from Defendants' allowance and facilitation of market manipulation by certain HFTs and for exchange fees paid during the Class Period and for the recovery of all monies paid to Defendants for real-time market data and order

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[4] Wash trades, alternatively termed wash sales, are prohibited by the CEA § 4c(a)(1) and (2), codified as 7 U.S.C. § 4c(a)(1) and (2). Wash trades occur when the same party takes both side of a trading transaction-in other words, the same party is both the buyer and the seller. Wash trades are banned under United States law because they can be used to manipulate prices, falsely give the impression of both volume and price movement. See also Scott Patterson et. al., in *Futures Markets Scrutinized*, WALL STREET JOURNAL March 18, 2013,

> "wash trades, are banned by U.S. law because they can feed false information into the market and be used to manipulate prices. Intentionally taking both sides of a trade can minimize financial risk for the trading firm while potentially creating a false impression of higher volume in the market. The [CFTC] is focused on suspected wash trades by high speed firms in futures contracts tied to the value of crude oil, precious metals, agricultural commodities and the Standard & Poor's 500-stock index, among other underlying instruments[.]"

Spoofing is a cousin of wash trades, also banned by CEA § 4c(a)(5)(C), §4c(a)(2)(B) and §9(a)(2) is refers to the practice of canceling large amounts of orders which orders can create the impression of liquidity and market activity. *See also CFTC v. Moncada*, Case No. 12-cv-8791 (S.D.N.Y. Dec. 4, 2012).

information during the Class Period. Plaintiffs also seek declaratory relief from the continuance of such unlawful practices.

JURISDICTION AND VENUE

14) This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1337 and 7 U.S.C. §§ 1 et seq., Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§15(a) and 26, and Section 22 of the CEA, 7 U.S.C. §§ 1a(4) and 25(a)(1)(D), and 18 U.S.C. § 1951.

15) Venue is proper pursuant to Judicial Code, 28 U.S.C. § 1391(a) and (b) and 7 U.S.C. § 25(c), because Defendants reside in this judicial district, and the events giving rise to the claims asserted herein occurred in this judicial district.

PARTIES

Plaintiffs

16) Plaintiffs suffered injury during the Class Period caused by the wrongful actions of Defendants as alleged herein and include:

a) Plaintiff William C. Braman ("Plaintiff Braman," and together with Plaintiffs Mendelson and Simms, the "Plaintiffs") is an individual residing in the Northern District of Illinois. Plaintiff Braman purchased and/or sold futures contracts at the CBOT and CME during the Class Period and was damaged by Defendants' allowance and facilitation of a marketplace manipulated by HFTs and by his reliance on what was falsely represented to him as real-time market data.

b) Plaintiff Mark Mendelson ("Plaintiff Mendelson," and together with Plaintiffs Braman and Simms, the "Plaintiffs") is an individual residing in the Northern District of Illinois. Plaintiff Mendelson purchased and/or sold futures contracts at the CBOT and CME during the Class Period and was damaged by Defendants' allowance and facilitation of a marketplace manipulated by HFTs and by his reliance on what was falsely represented to him as real-time market data.

c) Plaintiff John Simms ("Plaintiff Simms," and together with Plaintiffs Braman and Mendelson, the "Plaintiffs") is an individual residing in the Northern District of Illinois. Plaintiff Simms purchased and/or sold futures contracts at the CBOT and CME during the Class Period and was damaged by Defendants' allowance and facilitation of a marketplace manipulated by HFTs and by his reliance on what was falsely represented to him as real-time market data.

Defendants

17) Defendants caused injury to Plaintiffs during the Class Period by their wrongful actions as alleged herein and include:

Exchange Defendants

a) Defendant CME Group, Inc. ("CME Group"), is a Delaware corporation that owns and operates derivatives exchanges, including the CME and the CBOT. The CME Group's principal place of business and location is in Chicago, Illinois.

b) Defendants the Chicago Board of Trade ("CBOT") and the Chicago Mercantile Exchange ("CME") are wholly owned subsidiaries of the CME Group, Inc. whose principal place of business is in Chicago, Illinois.

Individual Defendants

c) Defendant Terrence A. Duffy ("Duffy") has served as Executive Chairman and President of the CME Group since 2012. Previously he served as Executive Chairman since 2006, when he became an officer of the CME Group. As alleged herein, Defendant Duffy was responsible for knowingly making false and misleading statements to the press, the United States Congress, the investing public in general and the Class in particular regarding the exploitation of the Latency Loophole by certain preferred HFTs and other clandestine arrangements made by Defendants to enhance profits at the expense of Plaintiffs and the Class.

d) Defendant Phupinder Gill ("Gill") has served as the Chief Executive Officer of the CME Group since 2012. Previously he served as President of the CME Group since 2007 and as President and Chief Operating Officer of CME Holdings and of the CME since January 1, 2004. In addition to running the firm's day-to-day operations, Defendant Gill is responsible for implementing strategic initiatives to expand the CME Group's core business and pursue new global growth opportunities in over-the-counter and emerging markets.

e) Defendant Bryan T. Durkin ("Durkin") has served as Chief Operating Officer of the CME Group since July 2007. He is responsible for the Products & Services, Marketing, Research & Product Development, Technology, Global Operations and Enterprise Solutions Divisions, as well as the company's global offices. Additionally, he is President of GFX Corp., a wholly owned subsidiary of the CME Group that provides liquidity in foreign exchange futures. Defendant Durkin led the global integrations following the CME's merger with the CBOT in

2007 and CME Group's acquisition of the New York Mercantile Exchange ("NYMEX") in 2008. Before joining CME Group, Durkin served as Executive Vice President and Chief Operating Officer of the CBOT. Prior to that role, he was in charge of the CBOT's Office of Investigations and Audits where he oversaw the audits, financial surveillance, trade practice and market surveillance self-regulatory and enforcement divisions for the exchange. His career with both CME Group and CBOT spans more than 30 years.

f) Defendant Anita Liskey ("Liskey") has served as Managing Director, Corporate Marketing and Communications of the CME Group since 2007, and Managing Director, Corporate Marketing and Communications of the CME since 2002. As alleged herein, Defendant Liskey was responsible for knowingly making false and misleading statements to the press, the investing public in general and the Class in particular regarding the exploitation of the Latency Loophole by certain preferred HFTs and other clandestine arrangements made by Defendants to enhance profits at the expense of Plaintiffs and the Class.

18) The acts alleged in this Complaint to have been committed by the Defendants CME Group, CBOT, CME, Duffy, Gill, Liskey and Durkin (hereinafter all collectively referred to as "Defendants") were authorized, ordered, or done by their directors, officers, agents, employees, or representatives while actively engaged in the management of the Defendants' governance and operations.

CLASS ALLEGATIONS

19) Plaintiffs bring this class action pursuant to Federal Rule of Civil Procedure 23 on behalf of all public investors who purchased and/or sold futures contracts listed on a

U.S.-based exchange, as well as all persons or entities who directly or indirectly paid for real-time data and price information for financial futures contracts, agricultural, energy, metal, equity index, foreign exchange and interest rate futures and options contracts listed by the Defendants and paid exchange fees to trade financial futures contracts and other futures contracts and options listed at the CBOT and CME between January 1, 2005 and April 10, 2014 (the "Class Period"). Excluded from the Plaintiff Class are Defendants, any officer, director, partner or owner of any of the Defendants, members of their immediate families and their legal representatives, heirs, successors or assigns and any entity in which Defendants have or had a controlling interest, and any individuals or entities that that were parties to any of the illegal and anticompetitive preferential agreements, fee reductions, rebates or other improper financial incentives as alleged herein.

20) The members of the Plaintiff Class are so numerous that joinder of all members is impracticable pursuant to F.R.C.P. Rule 23 (a) (1). While the exact number of Plaintiff Class members is unknown to Plaintiffs and can only be ascertained through proper discovery, Plaintiffs believe that the number of persons or entities who purchased and/or sold futures and futures and options contracts and who purchased real-time market data on futures contracts listed by Defendants during the Class Period is in the thousands, and those persons or entities are geographically dispersed.

21) Plaintiffs' claims are typical of and not antagonistic to the claims of the members of the Plaintiff Class, as all members of the Plaintiff Class are similarly affected by Defendants' wrongful conduct that is complained of herein.

22) Plaintiffs will fairly and adequately protect the interests of the members of the Plaintiff Class and have retained counsel competent and experienced in class actions and commodities law, commodities litigation and the futures industry. They fully intend to vigorously prosecute this action.

23) In addition, the conduct of Defendants has been and continues to be of such a nature, as alleged herein, to be generally applicable to all members of the Plaintiff Class, thereby making appropriate final injunctive relief as sought and described more fully herein on a Classwide basis.

24) Common questions of law and fact exist as to all members of the Plaintiff Class and predominate over any questions solely affecting individual members of the Plaintiff Class within the meaning of F.R.C.P. Rule 23 (a) (2). Among the common questions of law and fact are:

(a) whether Defendants implemented the manipulative acts, devices or contrivances or engaged in the alleged fraudulent scheme and course of business alleged herein;

(b) whether the CEA and CFTC Rules and Regulations were violated by Defendants' conduct alleged herein;

(c) whether Defendants acted knowingly or recklessly in connection with the misconduct alleged herein;

(d) whether the CME and CBOT invited and allowed the HFTs to trade ahead of everyone else based upon information that only they possessed;

(e) whether the inside trading and front-running of the HFTs had the result of manipulating prices in the markets for the CME and CBOT's futures contracts;

(f) whether the CME and CBOT invited, allowed and profited from the fraudulent practices of certain HFTs including the Latency Loophole;

(g) whether as a result of the any of these activities, Defendants caused prices in the CBOT and CME futures markets to be either manipulated by fraudulent means or artificial during the Class Period;

(h) if futures prices were manipulated, to what extent were the prices in the CBOT and CME futures markets artificial;

(i) if futures prices were manipulated, what effect did the Exchange Defendants' use of fraudulent means have on the market;

(j) whether Defendants' course of conduct in representing that the price information they sold was as represented, Defendants were engaging in a fraud on the marketplace or simple fraud;

(k) whether Defendants' conduct resulted in the use of fraudulent means to manipulate CME and CBOT's futures markets;

(l) whether Defendants' aided and abetted the violations of the CEA as alleged in the Complaint;

(m) whether Defendants' conduct violated the federal antitrust laws by imposing illegal restraints of trade;

(n) whether Defendants' wrongful violations of the federal antitrust laws as alleged in the Complaint caused Plaintiffs and the Class recoverable damages under the antitrust laws;

(o) whether Defendants' wrongful violations of the federal antitrust laws as alleged in the Complaint entitle Plaintiffs and members of the Class to

injunctive relief;

(p) whether a constructive or actual trust should be impressed upon the ill-gotten gains obtained by Defendants as fruits of their misconduct and mismanagement;

(q) whether and what equitable relief should be granted to Plaintiffs and the Plaintiff Class; and

(r) the extent of damages sustained by members of the Plaintiff Class and the appropriate measure of damages.

25) Each and every Class member relied on the price information of futures contracts represented by Defendants' exchanges to make trades.

26) Each and every Class Member relied on the reasonable assumption that the Exchange Defendants were providing trading markets free of manipulation by fraudulent means.

27) Each and every Class Member relied on the assumption that they were not trading in a structurally uncompetitive market, and have suffered economic losses as a result of trading in a market that was, in fact, manipulated by fraud.

28) A class action is superior to other available methods for the fair and efficient adjudication of this controversy since joinder of all members of the Plaintiff Class is impracticable. Further, as the damages suffered by most individual members of the Plaintiff Class may be relatively small, the expense and burden of individual litigation make it virtually impossible for most members of the Plaintiff Class to redress the wrongs done to them individually. The Plaintiff Class is readily definable, and prosecution of this action as a class action will reduce the possibility of repetitious litigation and different

treatment of different Defendants for the same misconduct and damages. There will be no significant difficulties in managing this action as a class action.

29) Class members' identities and futures transactions can generally be identified by looking at the records of the CME and CBOT trade clearing entity, CME Clearing, and other trade clearing firms at the CME and CBOT.

SUBSTANTIVE ALLEGATIONS

30) The CBOT and the CME are designated contract markets ("DCMs") registered with the Commodity Futures Trading Commission ("CFTC"). Pursuant to 7 U.S.C. § 7(d)(2), they are required to regulate themselves in conformity with the CEA and all regulations enacted by the CFTC including what are termed, "Core Principles" such as the Prevention of Market Disruption, the Protection of Markets and Market Participants and the listing of contracts Not Readily Subject of Manipulation. The Exchange Defendants are required to operate in accordance with the strictures of the CEA.

31) Futures contracts are agreements to make or accept delivery of a specified quantity and type of commodity during a specific month in the future at a price agreed upon at the time the commitment is made.

32) Prices of all futures contracts are quoted in terms of the last price, the opening price, the highest price paid for the trading period and the lowest price paid for a certain trading period. Price information is also represented in terms of a "book." The "book" shows the highest price offered to be paid for a contract, otherwise called the "bid," along with the lowest price for which a contract is offered for sale, otherwise called the "offer." The "book" also shows how many contracts are offered for sale or sought to be purchased at each offer price and bid price respectively.

33) Ten Year Notes, U.S. Treasury Bonds, Five Year Notes, and Two Year Notes are financial futures and financial futures options contracts that are standardized according to the terms specified by the CME and CBOT.

34) United States Five Year Notes, Ten Year Notes and Thirty Year Bonds are United States debt instruments and compromise the "underlying financial" of the Five Year Notes, Ten Year Notes and Thirty Year Bond financial futures contracts at the CBOT and CME, as these terms are defined and used in Sections 1a(3) and 22 of the CEA, 7 U.S.C. §§ 1a(3) and 25.

35) Prices for financial futures contracts like U.S. Treasury Bonds are the benchmark for the price of United States 30-year debt. This price information for Defendants' U.S. Treasury Bond contract is represented as being the most accurate instant reflection of the cost of owning the thirty-year debt instrument issued by the United States Treasury at any time. The U.S. Treasury Bond contract like all financial futures contracts listed at Defendants' futures exchanges are believed to be an accurate and transparent reflection of the market for the underlying government debt instrument and as such serve an important function in the financial marketplace.

36) The CME and CBOT sell this price information as accurate present and real-time price and order information. Alternatively, this information is included by the payment of exchange fees. Defendants deny that "something less than real-time data" is given to any market participant.[5]

[5] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3516386492001 Defendant Duffy's quotation is at 2:50 and completely ignores the Latency Loophole of fills/price data going out first to some market participants.

37) It is axiomatically true that the integrity of the United States derivatives markets is of cornerstone of the economy and a vital national interest. Supply and demand for components of economic growth and function like crude oil, commodities and interest rates are reflected in the futures markets. The price of the futures markets directly affects how supply and demand is passed onto the American consumer. As much as ninety two percent of the world's largest 500 companies utilize the derivatives markets.[6]

Latency Loophole

38) The Latency Loophole allows certain market participants to know that orders they entered were executed and at what price, and to enter many subsequent orders, all before the rest of the market participants found out the status of their own initial orders. Continuously entering orders and getting confirmation of the price at which these orders are filled, before the rest of the public even knows about the executed trades, empowers HFTs that are able to utilize the Latency Loophole with a massive informational and time advantage in discerning actual price, market direction and order flow before anyone else. As a result of Defendants permitting and encouraging the use of the Latency Loophole by certain preferred HFTs, those preferred HFTs did make trades ahead of the public dissemination of information and made improper excess profits from such trades to the detriment of Plaintiffs and the Class.

39) What is staggeringly inequitable is that the Latency Loophole endows certain market participants with a substantial time advantage or head start during which they can

[6] http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aR4pMAz.ogAA&refer=us

execute innumerable trades based on non-public information.[7] HFTs then use this advance knowledge to discern where large orders are positioned and to anticipate price movements by engaging in exploratory trading by pinging the market with the use of multiple small orders.[8] Allowing some market participants the ability to trade ahead of large orders and effectively raising or lowering the price paid by institutions and everyone else is a tax on the public.[9] In reality, the advantages given to HFTs by the Defendants effectively create a "zero sum" trading scenario where the HFTs gain what the Class loses by effectively allowing HFTs to skim an improper profit on every futures transaction, which some market commentators have described as "legalized theft."[10] By

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[7] This informational head start and the ability to act on it are analogous to front-running. *See also* Sam Mamudi, Charlie Munger: *HFT is Legalized Front-Running*, BARRONS.COM, May 3, 2013, http://blogs.barrons.com/stockstowatchtoday/2013/05/03/charlie-munger-hft-is-legalized-front-running/

[8] Exploratory trading can be used to gather valuable non-public information about prospective price movements by the use of an HFT's small exploratory orders and the HFT seeing where these orders are filled. Logically, the more the exploratory orders that are placed, the more data points that are acquired about future price movement. *See also*, Adam D. Clark-Joseph, *Exploratory Trading*, Unpublished paper, January 13, 2013, http://www.nanex.net/aqck2/4136/exploratorytrading.pdf.

[9] Barry Ritholtz, *Speed Trading in a Rigged Market*, BLOOMBERG, Mar. 31, 2014, ("High frequency trading is a tax on investors, encouraged by the exchanges"), http://www.bloombergview.com/articles/2014-03-31/speed-trading-in-a-rigged-market; *see also* Scott Patterson, Jenny Strasburg and Liam Pleven, *High-Speed Traders Exploit Loophole* (online WSJ May 1, 2013) (commenting on the Latency Loophole, former CFTC Technology Advisory Committee member and University of Maryland finance professor Pete Kyle stated: "Traders able to see market swings milliseconds before others gives them 'an informational advantage,' … and likened the activity to 'a tax on other traders' because 'you get all the gains from being the first guy' to trade," http://online.wsj.com/news/articles/SB10001424127887323798104578455032466082920

[10] *Id.*, *see also* Joseph E. Stiglitz, *Tapping the Brakes: Are Less Active Markets Safer and Better for the Economy?* at p. 5 (paper presented at the 2014 Financial Markets Conference, Atlanta, April 15, 2014): "High frequency trading…is mostly a zero sum game…[t]here is a fixed amount of money that goes somewhere. Gains to one party come at the expense of money that would have gone to others," available at: http://www.frbatlanta.org/documents/news/conferences/14fmc/stiglitz.pdf; Seth Merrin,

providing certain market participants and HFTs with what is in essence a "sneak peek" at price information and the ability to act on it, Defendants engaged in a fraud on the marketplace, deceptive practice and failed to maintain a marketplace that is free from market price distortion and manipulation. As a result of secretly positioning Plaintiffs and the Class at the wrong end of this "zero sum" trading scenario, Defendants permitted and facilitated those preferred HFTs to make trades ahead of the public dissemination of information and to make improper excess profits from such trades, while directly damaging Plaintiffs and the Class to at least the same extent that the preferred HFTs illegally profited therefrom.

40) Throughout the Class Period, Defendants concealed the fact that they were not providing real-time price information and continued to charge fees to all users of its data and financial markets for receiving allegedly real-time data and transparent price information. Defendants failed to reveal the Latency Loophole for most of the Class Period until after its existence was discovered and disclosed by Scott Patterson and two other journalists at the *Wall Street Journal.*

41) When confronted with the Latency Loophole by the press, Defendant CME Group, through its Chairman, Defendant Duffy, made deliberately misleading statements

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Comment: Old news, flash boys, FINANCIAL TIMES (April 4, 2014): "However, there are some HFT strategies that use the same tools – technology, speed, collocation and other advantages – but with the intent to profit from price discrepancies from large institutional orders. The latter is a zero sum game, where the few benefit at the expense of many," http://www.ft.com/intl/cms/s/0/99cf0096-bbe6-11e3-84f1-00144feabdc0.html#axzz37pVJS0vk; *Economist Debates: High-frequency trading*: *Statements – Opening Statement of Seth Merrin*, Founder and CEO of Liquidnet (March 7, 2012): "High-frequency traders are, by design, trading ahead of market orders to the detriment of long-term investors. HFT benefits the very few at the expense of the very many, which defies the purpose of why a market exists and as a result has lessened the overall quality of the markets." http://www.economist.com/debate/days/view/816.

about it, calling it a "speed of light issue…simply cannot address" when in reality the Latency Loophole has nothing to do with the speed of light. The Latency Loophole is nowhere a part of the General Theory of Relativity- it is a CME/CME Group network design issue.[11] In the high frequency ecosystem, there are time increments of milliseconds and microseconds; they are measurable and actionable, so casually throwing in mention of the speed of light may sound good, but it is entirely a distraction.

42) On other occasions, when asked about the Latency Loophole, Defendant CME Group, through its Chairman, Defendant Duffy, mischaracterized the issue, stating that: "when we put out our market data to the world there is no latency, it goes out at the same time." This statement ignores the fact that market data about executed trades, or order fills, are sent to some market participants before the market data is sent to the public data feed and that Exchange Defendants' customers with direct feeds can see this data more quickly (*i.e.*, with less latency).[12]

43) When Defendant CME Group, through its Chairman Defendant Duffy, admitted the existence of the Latency Loophole as a delay, "between market data and trade confirmation" it falsely stated that the delay is "one microsecond," then subsequently acknowledged that it is one millisecond.[13] These units of measurement are different by ten orders of magnitude (one millisecond=1,000 microseconds) and extremely

[11] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3563813069001 quotation at 1:58

[12] *Id* at 2:07

[13] Id at 2:30

meaningful in the marketplace, as the CME Group well knew at the time of making these false statements.

44) Throughout the Class Period, Defendants have concealed the fact that they are not providing a marketplace free of market manipulation because they were encouraging HFTs to exploit the Latency Loophole to execute unfairly trades based upon non-public information and to obtain advance access to price data.[14]

45) Defendants sell what they term "real-time" price data to the public while also profiting from the sale of advance access to price data to certain market participants with DMA.[15] As explained by Robert Khuzami, the SEC enforcement director:

> Improper early access to market data, even measured in milliseconds, can in today's markets be a real and a substantial advantage that disproportionately disadvantages retail and long-term investors.[16]

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[14] When Defendant CME Group's Chairman, Defendant Duffy, was asked about Michael Lewis' book, "Flash Boys," he stated " people are getting preferential treatment on speed which in the securities world could be the case but in our world it's completely different. So it's not like that." http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3520235138001 quotation at 1:01. At the time Defendant Duffy made this statement, he deliberately omitted to mention the CME Group's Latency Loophole, co-location tiers and DMA to data feeds without credit checks, knowing that without such further disclosures the statement that he did make would be false and misleading.

[15] As described earlier herein, direct market access or DMA allows some market participants to enter orders directly into the exchange's trade or order matching engine for execution. DMA is also defined in 17 CFR §38.607:

> A designated contract market that permits direct electronic access by customers (i.e., allowing customers of futures commission merchants to enter orders directly into a designated contract market's trade matching system for execution) must have in place effective systems and controls reasonably designed to facilitate the FCM's management of financial risk, such as automated pre-trade controls that enable member futures commission merchants to implement appropriate financial risk limits. A designated contract market must implement and enforce rules requiring the member futures commission merchants to use the provided systems and controls.

[16] http://online.wsj.com/news/articles/SB10000872396390443524904577651450485707824

The purpose of buying the fastest market access, or having the lowest latency connection, is not to have speed for speed's sake.[17] The purpose of the low latency arms race is the ability to be the first to see and react to price. Lower latency/higher relative speed in the high frequency ecosystem translates into the ability to discern price information faster than others **in order to act on this information** before anyone else can.[18] Being faster translates into being able to see price information before everyone else and more importantly, being able to trade ahead of others and as such affect all others, by having discerned this price information first.

46) Those market participants with access to DMA, along with their speed advantages (among other structural advantages given by the exchanges such as not having orders slowed down by risk or clearing checks) and the Latency Loophole, obtain and exploit market data first in what is actually real-time. This actual real-time access is distinguishable from what the CME and CBOT sell to everyone else as "real-time" market data, since this market data has already been seen and already acted on by preferred HFTs; in actuality it is stale information fraudulently repackaged and sold as real-time market data.

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[17] The CME Group offers different tiers of access to data whose price varies dependent upon the speed at which data is received by purchasers. Different bandwidth and physical co-location sites provide for varying latencies. http://www.cmegroup.com/globex/files/connectivityoptions.pdf

[18] The lower the latency the higher the speed. MIT Professor Andrei Kirilenko, former Chief Economist of the CFTC, defines latency as:

> "the delay between the occurrence of an event and its manifestation and recording. A standard way to measure latency is by determining the time it takes a given data packet to travel from source to destination and back, the so-called round-trip or RTT."

http://www.fields.utoronto.ca/programs/cim/13-14/finance_seminar/Kirilenko.pdf

<u>Knowing Refusal to Enforce Rules Against Wash Sales and Other Manipulative Conduct</u>

47) In 1936, the United States Congress outlawed wash trades with the passage of the Commodity Exchange Act, calling the activity "pure, unadulterated fraud."[19] Despite this historic and clear prohibition, wash trades are an integral and regularly used part of many HFT strategies, and are commonly used to reach the trading volume levels necessary to get payment in the form of rebates or stipends from the Exchange Defendants pursuant to clandestine incentive agreements.

48) Defendants allow for the practice of wash trades because they comprise by some estimates fifty percent of the Exchange Defendants' total trading volume and also because HFT transactions account for up to thirty percent of the CME Group's revenue.[20] Defendants provide discounts to the more aggressive HFTs because they generate volume, not just from their own trades, which are considerable and include an immense numbers of wash trades and scratch trades, but also from all those who are on the opposing side to the HFTs' trades. The parties on the *contra* side of the HFTs are all other market participants from whose trading volume the Exchange Defendants generate most of their revenue. HFT wash trades and scratch trades provide the impression of immense volume, which in turn attracts non-HFTs to the market, mistaking volume for

[19] "This bill seeks to minimize cheating or fraudulent practices by outlawing…wash sales, cross trades, accommodation trades, and other fictitious transactions. There hardly is any need for comments on these provisions." Senator Smith 80 CONG. REC. 78455 (May 26, 1936). *See also* statement by Senator Pope, "Wash sales are pretended sales made openly in the pit or trading place for the purpose of deceiving other traders. They are employed to give the false appearance of trading and to cause prices to be registered which are not true prices." 80 CONG. REC. 6159 (Apr. 17, 1936).

[20] CFTC's then Commissioner Bart Chilton on interview with CNBC on March 18, 2013 states that according to CFTC surveillance wash trades occur daily at "large, voluminous level-I mean really to me a shocking level." http://video.cnbc.com/gallery/?video=3000154836&play=1.

the presence of legitimate liquidity.[21] Without the discounts and agreements given by the Exchange Defendants to favored HFTs, along with the occurrence of wash trades, the volume numbers at the Exchange Defendants would be dramatically lower, and their profits would be greatly diminished.

49) While Defendants enacted further prohibitions against wash trades in November of 2013, they made provision for certain HFTs to make their "Self-Match Prevention Measures" ("SMP") against the occurrence of wash trades ***voluntary***, thereby making enforcement against certain preferred market participants ephemeral at best as opposed to other market participants.[22] By making the Self-Match Prevention voluntary, the CME Group allowed preferred HFTs to operate according to their own honor systems when it comes to complying with the Exchange Defendants' prohibitions against wash trades, knowing full well that such permissiveness provided the motive and opportunity for repeated and daily violations by preferred HFTs of the anti-manipulation provisions of the CEA. For example, if an HFT did not use SMP, then when questioned by the CME about whether a particular transaction was properly matched against the correct buy and sell transactions, there would be nothing to stop such HFT from assigning each side of the transaction to different algorithms/strategies/sub-accounts and thereby evading after the fact any liability for having committed a wash trade. This illegal practice proliferated

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[21] Incentives in the form of reduced or waived fees to HFTs has an impact on CME revenue comparable to the case of Barclays LX and its allowance of predatory HFTs to attract market share and revenue. *See* Dave Hunter piece http://dave-hunter.com/why-barclays-lied

[22] "**Q16: Is the use of CME Group's Self-Match Prevention functionality mandatory?** A16: Use of CME Group SMP functionality is optional and each firm has the flexibility to tailor its application of SMP functionality and its use of SMP IDs in ways that are appropriate for its particular business model and trading strategies." http://www.cmegroup.com/rulebook/files/cme-group-ra1308-5.pdf.

in an environment when a typical HFT regularly may maintain 200 sub-accounts or more to accommodate algorithmic strategies, since an HFT could easily expunge the record of multiple wash trades by deliberately re-assigning the closing side of transactions to different sub-accounts long before any regulatory exchange oversight would come into play.

50) Defendants allowed and encouraged such illegal and widespread wash trading by HFTs through the Latency Loophole, which created artificially inflated volume numbers and profits for Defendants.[23]

51) Confidential Witness A, a high frequency trader, stated on June 13, 2014 that wash trades are part of HFT strategies in the futures market where firms need to trade continuously in a manner which assists in detecting market direction and permits them to exit adverse trades when the market goes against their positions. HFTs continuously place small bids and offers (called bait) at the back of order queues to gain directional clues. If the bait orders are hit, the algorithm will place follow-up orders to either accumulate favorable positions or exit "toxic" risks, a process which leverages bait orders to gain valuable directional clues as to which way the market will likely move. The initial bait orders are very small while subsequent orders, once market direction has been identified, are very large. A portion of the large orders that follow the smaller bait orders are wash trades. All of this activity happens continuously and within time periods that are undetectable to humans.

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[23] http://online.wsj.com/news/articles/SB10001424127887323639604578366491497070204.

52) In addition to wash trades, the Latency Loophole exploited by Defendants was in contravention of any pretense of market transparency and a level playing field required to be maintained on self regulatory market exchange, because it allowed favored firms to trade ahead of all others based on non-public information:

> Firms can use their early looks at CME trading data in several ways. One strategy is to post buy and sell orders a few pennies from where the market is trading and wait until one of the orders is executed. If crude oil is selling for $90 on the CME, a firm might post an order to sell one contract for $90.03 and a buy order for $89.97.
>
> If the sell order suddenly hits, the firm's computers detect that oil prices have swung higher. Those computers can instantly buy more of the same contract before other traders are even aware of the first move.[24]

This has not prevented Defendant Duffy from repeatedly boasting about the CME's supposed transparency for smaller investors, as if the Latency Loophole and the CME's favored firms were not trading ahead of them: "I think transparency is of the utmost of importance for the individual investors especially the smaller investors. They've got to have confidence that the game is not rigged for lack of a better term and that they have an opportunity to participate."[25]

53) Former CFTC Commissioner Bart Chilton has stated that wash trades occur in the futures markets on a daily basis at voluminous and shocking levels. This practice,

[24] http://online.wsj.com/news/articles/SB10001424127887324766604578456783718395580?cb=logged0.6591444732621312.

[25] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3520929979001 quotation at 2:55.

according to Chilton, is widespread among HFTs, where such "rapid-fire computer-driven strategies distort markets and boost the cost of trading for individual investors."[26]

54) The CME Group allows HFT firms to place voluntarily identifiers on orders coming from different algorithms or strategies within their firms, a system that effectively leaves compliance up to the very entities that the law seeks to have supervised by the exchanges for anti-manipulative practices. The CME Group software that is able to label all orders with specificity beyond the fact that they emanate from one single HFT is called Self-Match Prevention. The CME Group's prohibition against wash trades allows HFTs an "out" if they state that the suspected wash trade was either not intentional or that it did not emanate from the same algo or sub-account.[27] Given that a HFT firm may have 200 traders or algorithms and can identify which trade came from what sub-account or algo within the firm after the transaction is completed, the CME Group's wash trade prohibition against HFTs is illusory at best when left in the control of an HFT that depends upon the use of multiple wash sales in fractions of seconds for algorithmic price discovery.

55) The Exchange Defendants profit from the occurrence of wash trades and have a vested interest in not having more robust safeguards against them because they contribute significantly to the Exchange Defendants' volume numbers and revenue. Were the volume of wash trades excluded from the Exchange Defendants' volume and revenue numbers, the radically reduced volume numbers would exert adverse pressure on the CME Group's stock price, not to mention the revenue to members of CME Group's

[26] http://www.reuters.com/article/2013/03/18/cftc-washtrades-chilton-idUSL1N0CADUD20130318.

[27] http://www.cmegroup.com/rulebook/files/cme-group-ra1308-5.pdf

governance who have equity interests in participating HFTs in addition to stock ownership in the CME Group, Inc.

The Exchange Defendants Improperly Used Incentive Agreements to Promote HFT Transaction Volume While Failing to Disclose Such Material Facts to Other Market Participants

56) The Exchange Defendants have made known that they offer incentive agreements called market maker programs in new and illiquid, or thinly traded markets, as a way to bring in trading activity and market participants to these markets and serve a legitimate economic purpose. These agreements were widely known to exist, but what Defendants did not reveal during the Class Period was the material fact that such agreements have been utilized by the Defendants for the economic benefit of favored HFTs to the detriment of the public and non-favored marketplace participants as opposed to the creation of a truly diverse marketplace that provides substantial and non-fleeting liquidity.

57) Defendants have made repeated false statements about these incentive agreements. While the CME Group truthfully stated that it files them with their regulator and that the CME and CFTC make them available on their website, Defendants omitted to state the material fact that the terms of these agreements, including their existence in certain markets, are fiercely shrouded in secrecy and not accessible to the Plaintiff Class.[28] Defendants also omitted to inform the marketplace that the CME Group has demanded this level of secrecy from its regulator, the CFTC, for years, asking that they be notified if the CFTC receives any subpoenas or FOIA requests from any source, for

[28] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3563813069001

any information relating to the CME's incentive agreements, and which subpoenas and requests the CME Group would vigorously contest.[29]

58) Defendants have entered into clandestine incentive/rebate agreements in established and heavily traded contract markets with favored firms such as DRW Trading Group and Allston Trading, paying up to $750,000.00 per month in one of the most heavily traded futures contracts in the world. At no time during the Class Period have Defendants voluntarily revealed to the trading public that these material agreements exist in established markets. Defendants through their lawyers have repeatedly ridiculed the suggestion that clandestine agreements exist. The existence of these agreements in Eurodollar futures was only recently revealed by Bloomberg's Matthew Leising on June 19, 2014 in an online article entitled, *Perks Live Forever at CME Amid Review of Trade Incentives*.[30]

59) Confidential Witness B told Plaintiffs' lead counsel on May 19, 2014 that such Witness B has knowledge of the existence of a clandestine rebate agreement between the CME and a very large volume HFT firm that trades in the S&P500 E-Mini contract. The S&P500 E-Mini contract is arguably the most liquid and one of the most traded contracts in North America, and there can be no economically justified reason, such as to develop thinly traded markets, that would justify the CME and CME Group to maintain clandestine incentive agreements in this particular market, other than the improper intent

[29] http://wallstreetonparade.com/wp-content/uploads/2014/06/CME-Group-Makes-Repeated-Requests-to-Its-Federal-Regulator-to-Keep-Its-Secrets-Uh-Secret.pdf

[30] http://www.bloomberg.com/news/2014-06-19/perks-live-forever-at-cme-amid-review-of-trade-incentives.html.

to gain further and improper revenues at the expense of Class Members trading on such futures market.

60) According to sources within the futures industry, it was suspected that incentive agreements were first offered by the CME to select HFTs in the established markets of Eurodollars and the S&P 500 E-Mini contract around 2005. There is reason to believe that at least two other HFT firms with contacts to individuals who form part of CME exchange governance were offered clandestine incentive agreements in Eurodollars and S&P 500 E-Mini at around the same time.

61) The CFTC and New York Attorney General are now investigating these improper activities of Defendants, and have subpoenaed Defendants' clandestine contracts with certain HFTs, which contracts contain, on information and belief, secret preferential pricing arrangements between the CME Group and certain HTF firms. Among the HTF firms that have been subpoenaed to date in this regard are Virtu Financial Inc., Chopper Trading LLC, Jump Trading LLC and Tower Research Capital, LLC.[31]

62) The CME and CBOT publish the commission fees (alternatively called trading and clearing fees) they charge to the public on its website but do not publish these clandestine and hidden incentive agreements, which contain commission structures far below what is made available to the rest of the world.[32]

[31] http://online.wsj.com/news/articles/SB10001424052702303287804579447610625554506

http://www.bloomberg.com/news/2014-04-16/high-speed-traders-said-to-be-subpoenaed-in-n-y-probe.html

[32] http://www.cmegroup.com/company/files/CME_Fee_Schedule.pdf
http://www.cmegroup.com/company/files/CBOT_Fee_Schedules.pdf

63) The clandestine incentive agreements given by the CME Group and Defendants to certain HFTs in many instances also provide for the CME Group to pay stipends and rebates for trades made by such HFTs at the exchanges. The existence of these clandestine agreements was first revealed to the public in March 2014 through the S-1 filing of HFT firm Virtu Financial Inc., which contained the disclosure that the: "CFTC is looking into our trading during the period from July 2011 to November 2013 and specifically our participation in certain incentive programs offered by exchanges or venues during that time period."[33] Prior to this, Virtu boasted having only one trading day in which it realized a loss out of 1238 trading days.

64) By surreptitiously giving some firms the ability to trade for secretly discounted rates, the CME and CBOT have effectively violated their duties as self-regulatory entities and opted instead to maximize profit opportunities by collaborating with certain exchange-traded funds ("ETFs") and HFTs, thereby giving such ETFs and HFTs an advantage over all other market participants.[34] By deciding to pursue its own profit

[33] https://www.sec.gov/Archives/edgar/data/1592386/000104746914002070/a2218589zs-1.htm#dm16701_business quotation is taken from page 30.

[34] Since the CBOT and CME became demutualized and went public, their role as self-regulatory bodies has become more complicated in that the interests of a publicly traded company to maximize shareholder value must be balanced against the ability of the exchange to be the first line of defense against violations of the CEA and other federal laws, including the rules and regulations of the CFTC. It would seem logical to assume that the self-regulatory role would always be distinct from the role of maximizing profit but this is not the case. Nor is it possible it would seem, to separate the business interests of members of the exchange governance, including their equity interests in HFT firms with their roles in rule making and any involvement in business deals between the exchanges and HFTs when it comes to agreements, including clandestine ones like rebate and incentive agreements.

The atmosphere on the Board of Directors at the CME Group, Inc. is ripe with conflicts of interests. For example, Jack Sandner has been a member of the CME Group's Board of Directors since 1978 (and although retired from consulting there since 2013), he is also on the Board of Directors and owns an equity interest in the HFT firm Virtu Financial, LLC. Another

motives at the expense of performing its self-regulatory organization ("SRO") duties in enforcing CFTC Rules and Regulations and requiring compliance with the antifraud and other provisions of the CEA, Defendants have chosen to align themselves with favored high volume participants at the expense of the rest of the CME marketplace in clear contravention of federal law.[35] As such, Defendants have created an opaque and two-tiered marketplace, while at the same time inviting and soliciting the unsuspecting public to transact on its financial markets for Defendants' profit.

65) The CME Group has given out 341 private incentive agreements as of 2014, up from 56 such agreements in 2010. It was first revealed by Bloomberg News on June 19, 2014 that Defendants have long entered into these clandestine agreements, paying select favored market participant firms and HFTs to make trades, effectively providing them

CME Group Board of Director, William Shepard, was a backer of the HFT firm, Jump Trading, LLC and also Twitch Trading. Jump Trading has also been the subject of subpoena for HFT practices.

[35] Section 5(d)(2)(A) – "The board of trade shall establish, monitor, and enforce compliance with the rules of the contract market, including—
(i) access requirements;
(ii) the terms and conditions of any contracts to be traded on the contract market; and
(iii) rules prohibiting abusive trade practices on the contract market."

Section 5(d)(9)(A) – "The board of trade shall provide a competitive, open, and efficient market and mechanism for executing transactions that protects the price discovery process of trading in the centralized market of the board of trade."

Section 5(d)(12) – "The board of trade shall establish and enforce rules—
(A) to protect markets and market participants from abusive practices committed by any party, including abusive practices committed by a party acting as an agent for a participant; and
(B) to promote fair and equitable trading on the contract market."
http://legcounsel.house.gov/Comps/COMEX_NEW.pdf

with an unfair and material commercial advantage over all other unsuspecting market users, even in established and well traded markets such as Eurodollar futures.[36]

66) The CME's clandestine decision to provide such incentive agreements for preferred HFTs has empowered such HFTs to disadvantage unfairly and illegally other traders by having access to lower latency, DMA and the Latency Loophole, and further enabled them to trade ahead of everyone else by being able to detect their orders and changing price direction before such information reaches the rest of the trading market. At the same time that Defendants were granting such improper and illegal clandestine advantages to such preferred firms, the Exchange Defendants benefitted financially from the very traders that have been disadvantaged by collecting exchange fees and data fees from them, usually at rates far in excess of those being paid by the preferred HFTs. In light of these facts, it is not surprising that Defendants have been vocal supporters of high frequency trading, stating that: "all trading is good for the market as long as it is policed properly," while presumably having no issue with such condoned predatory and manipulative behavior going on in its own marketplace, and while making only anemic 'efforts' to police such improper conduct that is in clear violation of CME, CME Group and CFTC Rules and Regulations.[37]

[36] http://www.bloomberg.com/news/2014-06-19/perks-live-forever-at-cme-amid-review-of-trade-incentives.html.

[37] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3563670639001.

67) The Exchange Defendants have conflicts of interest so severe[38] since de-mutualization that they cannot adequately perform their self-regulatory duties in conformity with the CFTC's core principles of the Protection of Markets and Market Participants, or Execution of Transactions, which require that they: "ensure a competitive, open and efficient market and mechanism for executing transactions that protect the price discovery process of trading in the centralized market of the board of trade."[39]

68) Defendants have permitted preferred HFTs to use structural advantages, whether hidden and not, to execute trades ahead of everyone else by using the order information of all Defendants' other customers, thereby causing Class Members economic losses by such exploitation. This conduct by the Exchange Defendants is in direct violation of the CEA and the CFTC's Rule and Regulations, and has resulted in exchange-created, institutionalized fraudulent devices that encourage market manipulation and an opaque and hidden marketplace for financial futures. In allowing HFTs to use such improperly obtained order information, Defendants have sanctioned the practice of selectively allowing trading on non-public information in micro and milliseconds.

69) During the Class Period, the Exchange Defendants continued to charge exchange and data fees to Class Members, all the while representing to the world that what they offered was the real price of financial futures instruments and that they provided a

[38] CME Group's 2010 Form 10-K page notes that twenty of the CME Group's 38 board members own trading rights or "are officers or directors of firms who own trading rights on our exchanges." Page 31
http://files.shareholder.com/downloads/CME/2108553774x0x529156/D94F567D-ED01-46E1-911B-A90183B37953/MostRecentAnnualReport.pdf

[39] 17 CFR § 38.500

transparent and un-manipulated trading market. However, as Defendants well knew, what they had really accomplished was to sell price information to certain HFTs, allowing them unfettered and unfair advantages in transacting on their exchanges while at the same time reaping huge revenues for themselves both as exchanges and as individual exchange officers who also maintained significant equity ownership in the very HFTs being so advantaged.

Deliberate Misrepresentations and Omissions Made by Defendants in Furtherance of Their Improper Conduct

70) The CME Group, through Defendants Duffy and Liskey, has repeatedly made deliberately misleading statements about the Latency Loophole and why criticisms of predatory HFT practices and opaque markets do not apply at all to the futures markets like they do to the equities markets.[40]

71) When asked to address whether the certain market participants get access to price data before others, the CME Group stated, through Defendant Liskey: "CME Group only has one data feed that is distributed to all participants at the same time. No one can see another's order until it hits the order book, when it is public,"[41] and that data, as claimed

[40] For example, Defendant Duffy stated that "true transparency" comes from trading a product in only one place like the CME (conflating dark pools with fragmentation) and that it is "hard to get credibility on what the value of that price is" if it is dark. As Defendant Duffy well knew at the time, his statements were purposefully misleading, since he omitted to disclose that because of the Latency Loophole, CME fills are 'dark' to all participants but the owner of the fill for long enough for that owner, using HFT algorithmic trading technology, to make many subsequent trades. These trades are not occurring from natural price discovery but in darkness (similar to a dark pool in that there is no transparency). *See* http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3516904636001 at 1:25.

[41] http://www.futuresmag.com/2014/04/13/cme-group-responds-to-hft-suit

several weeks later by Defendant Duffy during a *Reuters Insider* interview on April 28, 2014, and again on the same date during a *Bloomberg Television* interview, "all comes out of one pipe."[42] Technically these are false statements since fills containing price information go out to some market participants before they go to the public data feed, allowing these same market participants the chance to make many subsequent trades, based on this information, before the rest of the market is made aware of the first trade. This is not a separate data feed but an issue with how the CME Group's feed is assembled and with how they disseminate the content.

72) When the CME Group because of media attention did publically acknowledge the existence of the Latency Loophole, it gave many inconsistent statements about the extent of the latency delay minimizing it as being "one microsecond," then subsequently stating that it is one millisecond.[43]

73) At other times, the CME stated that the latency times were as great as many milliseconds,

> CME spokeswoman Anita Liskey said the exchange operator is aware of the order delays, which industry officials refer to as a "latency."
>
> There are "times when customers experience a latency of a few milliseconds between the time they receive their trade confirmations and when the information is accessible on the public

[42] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3516904636001

[43] *Id.* at 2:30

> feeds," she said, noting that the delays "are not consistent and vary across asset classes." [44]

74) When asked about the Latency Loophole after testifying before the United States Senate Agricultural Committee on May 13, 2014, Defendant Duffy proceeded to dissemble that there was "no latency" and that the Latency Loophole did not matter because the futures exchanges represented a "vertical silo" so it was impossible to use the advance price information for arbitrage opportunities at other exchanges (again attempting to differentiate the defendants from the equity markets) all the while acting as if the structural advantage Defendants had established and given its favored market participants did not exist at the futures exchanges.[45]

75) When addressing the CFTC's Technology Advisory Committee on June 3, 2014, Defendant Durkin, in his role as Chief Operating Officer of Defendant CME Group, made statements before his regulator that would be true but for the existence of the Latency Loophole:

> Our market data is sent to everyone at once. There are no preferential data feeds that are provided exclusively to a particular segment of user base. While customers have several options in terms of how they receive data from us, we do not restrict anyone's access. Having multiple connectivity options makes our markets available and accessible to a broad array of market participants.

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44 http://online.wsj.com/news/articles/SB10001424127887323798104578455032466082920

45 http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3563813069001

> No one can see orders prior to them hitting our match engine and being made available to the order book.[46]

As Defendant Durkin well knew at the time, these assertions were false and misleading. Not only could Defendants' preferred HFTs see the price information in the form of executed orders before they made further orders based upon such new price information, they got to act on this information for what in the high frequency trading ecosystem was a relative eternity before the rest of the trading public were be able to obtain the same information and place their own orders.

76) On May 1, 2014 at the CME's first quarter earnings call, Defendant Gill, in his role as Chief Executive Officer of Defendant CME Group, denied the existence of the Latency Loophole and that the CME Group provides some market participants the ability to see price information and act on it before that same information makes the public data feed. He then went on like to extol the alleged benefits of HFT to all market participants:

> In our markets, high frequency traders are not afforded any special access or information that is not available to all other market participants. HFTs do not have access to, or information about, customer orders before orders reach the central limit order book. Market data is made available to all subscribers at the same time, and they have a number of options to choose how they want to receive it.
>
> Lastly, it is important to remember that market participants, regulators and academics have been discussing automated trading for years. Significant analysis has been done highlighting the benefit of these types of participants existing in our markets and given the liquidity they provide, which ultimately tightens the bid/ask spreads and reduces costs.[47]

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46 http://www.cftc.gov/ucm/groups/public/@newsroom/documents/file/tac_060314_transcript.pdf

47 http://www.morningstar.com/earnings/66591461-cme-group-cme-q1-2014.aspx?pindex=4

77) Time and again Defendants, through the CME Group's Defendant Duffy, have made public statements about the value of HFT to the public in terms of enhancing liquidity, all the while disingenuously and perfectly conflating liquidity with volume. High frequency trading does not in all or even many instances contribute to liquidity.[48] In other words, it does not put buyers and sellers together who would not otherwise meet; it jumps ahead of them in time increments that are indiscernible to all but state-of-the-art computer algorithms (transaction times denominated in micro and millisecond time increments) and tantamount to hyperkinetic but still, nonessential financial intermediation.

<u>FRAUDULENT CONCEALMENT</u>

78) The unlawful activity alleged herein was by its nature self-concealing. The hyperkinetic financial intermediation of the HFTs was not reported by the Exchange Defendants to their other customers in discernable increments that would reflect the volume or activity of the HFTs accurately. In fact, Defendants at no time during the Class Period revealed that they had given certain HFTs a Latency Loophole, or clandestine rebate and incentive agreements in well established and heavily traded markets.[49] The Exchange Defendants advertised on their website that faster speed,

[48] A research paper by the CFTC's former Chief Economist and MIT professor, Andrei Kirilenko found that the most aggressive and consistently profitable HFTs in the S&P500 E-Mini futures during August 2010 took liquidity away from the market, as opposed to contributing to liquidity. Andrei Kirilenko, Matthew Barron and Jonathan Brogaard, *Risk and Return in High Frequency Trading*, *available at*: http://ssrn.com/abstract=2433118.

[49] After Scott Patterson's article was published exposing the existence of the Latency Loophole and the subsequent press coverage of it, the CME and Exchange Defendants began to address the issue of wash trades and the Latency Loophole. After all the press coverage, the Latency

through the use of co-locating servers at or near the CME and CBOT's servers, makes all marketplace participants equal. This advertisement was deliberately misleading and designed to lull futures market participants into believing that Defendants' marketplaces presented a level playing field, while in reality Defendants were busy selecting preferred market participants to exploit all other market participants due through use of DMA and the Latency Loophole.

79) What Defendants at no time revealed was that the HFTs had a competitive advantage not only of speed, but also in reaction time to price movements due to the Latency Loophole which provided an undisclosed ability to act on price data before all other market participants. Even if the non-preferred market participants paid for collocation services, they would be unable to compete on a level playing field because of Defendants' failure to disclose the Latency Loophole.

80) Defendants' disclosure obligations went further than just the Latency Loophole, however, as Defendants' whole manner of running their exchanges was predicated on having multiple layers of preferential opportunities for favored HFTs and ETF clients. Thus had Defendants disclosed only the Latency Loophole to its members, preferred HFTs would still have been able to exploit the Latency Loophole to get a structural advantage over members that had not been afforded preferential treatment. Because of top tier collocation services that provide a latency advantage over standard co-location services, and in conjunction with nonpublic fee rebates afforded to preferred HFTs and tacit approval of illegal wash sale trading, preferred HFTs would still have been able to

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Loophole has been somewhat compressed, according to sources.
http://online.wsj.com/news/articles/SB10001424127887324766604578456783718395580

continue to exploit the Latency Loophole to get a structural advantage over firms not provided such preferential treatment.

81) Nor at any time during the Class Period did Defendants reveal that they were permitting the preferred HFTs, unlike all other market participants, to trade ahead of everyone else using price information, the Latency Loophole, clandestine incentive agreements and permissive utilization of prohibited activities like spoofing, baiting and wash trades, all of which together were not available to anyone other than these select HFTs.

82) Defendants continued to charge the public for the costs of seeing the data first in real-time, as if no one had already seen it and been able to act on it beforehand, acting as if the Latency Loophole did not exist and the value being represented for such access had not already been severely compromised.

83) Defendants entered into clandestine contracts with HFTs knowing that the activities of the HFTs would adversely affect all other individuals and entities that bought and sold Defendants' futures contracts on their exchanges, since Defendants knew well that allowing the HFTs to see and trade ahead of all other market participants would create a trading marketplace that would always be skewed in favor of the HFTs and put all other market participants at an insurmountable and unfair competitive advantage.

84) Defendants' actions were deliberately calculated to conceal the existence of fraudulent devices that abounded and thrived in Defendants' marketplaces, such as the heavy use of illegal wash trades by HFTs, the Latency Loophole and the clandestine rebate agreements. Such fraudulent devices and agreements that generated and

encouraged the manipulation of futures prices by those preferred traders in the know could not have been discovered by Plaintiffs and the Class any earlier than immediately before the filing of this suit.

85) Defendants, through the CME Group's Chairman and CEO and other CME agents, repeatedly gave false information to the public, journalists and the media, touting alleged advantages by the presence of HFT for price and liquidity, while never mentioning that they were allowing those same HFTs to get price information before everyone else through the Latency Loophole, the first tier of collocation, incentive agreements and the utilization of wash trades and then to trade on this price information in advance of the rest of the market. For example, Defendant Duffy states that all data "comes from one pipe."[50] This is statement is grossly misleading without the necessary second part of the disclosure so as not to make the first part false and misleading: because transaction fills go to some market participants before the trades make the public data feed, certain HFTs with access do in fact receive valuable price information before the rest of the market and in plenty of time through the use of computer algorithms to transact ahead of the rest of the market. While it is technically true that there is not a separate data feed, there is a very real and massive discrepancy with how the data is assembled and how the content is disseminated by the CME Group, a reality that creates an opaque and two-tiered marketplace.

86) When asked about its selling preferential access to certain favored market participants, the CME Group's regular response in the marketplace has been both false

[50] http://link.brightcove.com/services/player/bcpid3517188355001?bckey=AQ~~,AAAAC59qSJk~,vyxcsD3OtBMbTlF0rtwip3425Y5GGmjL&bclid=3516882341001&bctid=3516904636001.

and misleading. In this regard, the CME Group's Chairman, Defendant Duffy, made the following false and misleading statement during television interviews: "People say we are selling it to high frequency traders and not telling the rest of the world. That's not true."[51] In fact, the CME Group does sell preferential access to price information. Only certain preferred HFTs have the ability to consume and use the Latency Loophole and thereby gain unfair trading advantage in the marketplace, and the CME Group, CME and CBOT have made no effort to share this information with the rest of the trading public.

87) One of the recommendations of MIT Professor Andrei Kirilenko on May 13, 2014 during his testimony before the Senate Committee on Agriculture and their hearing on HFT was that the exchanges' information about latency discrepancies in their network should be reported on a regular basis:

> Knowledge about system latency can be behind the uneven playing field. To this end, automated exchanges should report system latency indicators to all market participants.
>
> Latency for messages for submitted, cancelled, modified, and executed orders should be reported on a periodic basis. This would greatly improve the transparency of the trading process in automated exchanges and level the playing field between those market participants that can estimate how long a bid or offer is likely to be available for trading and those that cannot.[52]

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[51] *Id.*

[52] http://www.ag.senate.gov/hearings/high-frequency-and-automated-trading-in-futures-markets Testimony of Dr. Andrei Kirilenko, Professor of the Practice of Finance, MIT Sloan School of Management.

88) Due to the fraudulent concealment, any applicable statute of limitations affecting or limiting the rights of action of the Class and Plaintiffs has been tolled during the period of fraudulent concealment.

First Cause of Action Against Defendants For Manipulation In Violation Of The Commodity Exchange Act, 7 U.S.C. § 9 And CFTC Rule 180.1

89) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

90) Plaintiffs bought one or more financial futures contracts during the Class Period and suffered losses as a direct result of the Defendants' creation of a trading marketplace where price was manipulated and distorted by fraud.

91) Defendants' actions alleged herein not only constitute a failure to ensure markets free of manipulation, they constitute active market manipulation of the price of the CME and CBOT's futures contracts, and/or the price of the commodities underlying these contracts.

92) As stated above, Defendants created a marketplace fraught with manipulation and clandestine, surreptitious trading that caused the prices of futures contracts to be artificial.

93) Defendants have perpetrated a fraud on the marketplace and intentionally concealed the activities of a select class of market participants from the rest of Defendants' customers and marketplace users while artificially altering the published price of futures and interest rate contracts at the CME and CBOT.

94) Defendants allowed for and facilitated, for profit, transactions that caused the prices of financial futures contracts to be recorded and registered that were artificial and not true and *bona fide* prices from a transparent and manipulation free market activity in

violation of Section 4c of the CEA, 7 U.S.C. §6c. Defendants participated directly in this unlawful conduct to manipulate and make artificial prices and a manipulated marketplace by establishing it and sustaining it for their profit.

95) By engaging in the aforementioned actions and practices, Defendants continuously misled Plaintiffs and the Class, in connection with the purchase and/or sale of futures contracts and/or defrauded and attempted to defraud Plaintiffs and the Class. Defendants purposefully concealed their actions and made false reports and statements and willfully attempted to deceive and did deceive Plaintiffs and the Class.

96) Plaintiffs and the Class purchased and sold futures contracts during the Class Period on Defendants' exchanges, and as a result of Defendants' unlawful activities: (a) transacted at the resulting artificial and unlawful prices; and (b) were further legally injured in that they transacted in an artificial and manipulated market operating under the artificial price signals caused by Defendants.

97) As a direct result, Plaintiffs and members of the Class who purchased and sold futures contracts during the Class Period were injured and are entitled to their actual damages.

Second Cause of Action Against Defendants For False Information In Violation Of The Commodity Exchange Act, 7 U.S.C. § 9

98) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

99) Plaintiffs and the Class paid Defendants for data and price information during the Class Period by paying for exchange fees and data fees and were damaged by relying on the truth of Defendants' representations about such data and price information, and then transacting in futures contracts and suffering losses because of such reliance.

100) Defendants' actions alleged herein not only constitute a failure to ensure markets free of manipulation, they constitute active market manipulation and falsification of the price of the CME and CBOT's financial and other futures contracts, and/or the price of the government debt and other commodities underlying these contracts.

101) By engaging in the aforementioned actions and practices, Defendants continuously misled Plaintiffs and the Class in connection with the purchase and/or sale of futures contracts and defrauded and attempted to defraud Plaintiffs and the Class.

102) Plaintiffs and the Class are each entitled to actual damages for violations of the CEA alleged in this complaint.

Third Cause Of Action Against The Exchange Defendants For Violations Of The Commodity Exchange Act, 7 U.S.C. §§ 25(b)(1) and (2)

103) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

104) The Exchange Defendants were statutorily required to have in place provisions and capacities for the "prevention of market manipulation" (7 U.S.C. §§7(b)(2)), "fair and equitable trading" (7 U.S.C. §§7(b)(3)), "financial integrity of transactions" (7 U.S.C. §§7(b)(5)), "compliance with (its) rules" (7 U.S.C. §§7(d)(2)), and the "monitoring of trading" "to prevent manipulation, price distortion, and disruptions of the delivery or cash-settlement process." (7 U.S.C. §§7(d)(4)).

105) The Exchange Defendants were also required, pursuant to 7 U.S.C. §2l(b)(7), to have rules "designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, in general, to protect the public interest..." As alleged with particularity herein, the Exchange Defendants failed to

protect the public interest and to preserve fair and unmanipulated markets for the trading of futures contracts.

106) Exchanges that fail, in bad faith, to comply with any of the statutory provisions identified in paragraphs 104 and 105 above are liable for actual damages. 7 U.S.C. §§25(b)(1) and (2). The conduct of Defendants complained of herein results not from ordinary or even gross negligence but rather from Defendants' knowing and active furtherance and participation in the scheme and wrongful course of conduct alleged herein, which conduct was undertaken for Defendants' own economic gain and in furtherance of no credible discharge of the Exchange Defendants' legal duties to maintain fair and unmanipulated exchanges in compliance with the CEA and CFTC Rules and Regulations.

107) Defendants' conduct as alleged herein violated their obligations to enforce rules relating to market and financial integrity and stability. Their continuous refusal and unwillingness during the Class Period to enforce CEA and CFTC Rules and Regulations against all forms of manipulative conduct, and in particular preferential order placement, electronic front-running, rebate arbitrage, slow-market arbitrage, wash sales, spamming, spoofing, and/or quote spamming on the Exchange Defendants' exchanges, and Defendants' continued misstatement and omissions of material facts regarding the preferred arrangements that Defendants promoted and created with HFTs, for the financial benefit of the Defendant Exchanges and to the financial detriment of Plaintiffs and the Class, clearly demonstrate that Defendants acted in bad faith.

108) Accordingly, the Exchange Defendants violated Sections 22(b)(1) and (2) of the Commodity Exchange Act, 7 U.S.C. §§25(b)(1) and (2).

Fourth Cause of Action Against Defendants For Aiding And Abetting Manipulation In Violation Of The Commodity Exchange Act 7 U.S.C. §1 et seq.

109) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

110) Defendants also each knowingly aided and abetted the violations of the CEA alleged herein. Further, each Defendant counseled, induced and/or procured the violations by the other Defendants and the preferred HFT firms as alleged herein.

111) Under Section 13c(a) of the CEA, 7 U.S.C. §13, Defendants are liable for willfully intending to assist and actually assisting in the manipulative activities as alleged herein.

112) As previously alleged, Defendants knowingly provided highly unusual and material assistance to conduct that they knew or had very strong reason to know was inherently manipulative, unlawfully moving prices, and specifically intended to move prices and allow certain preferred HFTs to trade ahead of the Plaintiffs and the Class in buying and selling futures contracts so that Plaintiffs and the Class were damaged by not receiving fair prices for their transactions, while such preferred HFTs were unjustly enriched with monies that should have gone to Plaintiffs and the Class. It is reasonable to infer, and Plaintiffs do allege, that Defendants intended to and did assist such manipulative conduct and manipulation.

113) Plaintiffs and Class Members are each entitled to actual damages for the violations alleged herein.

Fifth Cause of Action Against Defendants For Fraud

114) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

115) Defendants entered into clandestine contracts with certain HFTs knowing that the activities of these HFTs would adversely affect all other individuals and entities that utilized the Exchange Defendants' futures contracts. Defendants knew full well that allowing certain preferred HFTs to use structural and hidden advantages to trade against and exploit the Exchange Defendants' other market users would create an unfair and manipulated marketplace in violation of the CEA and Defendants' obligations thereunder as previously alleged herein.

116) Throughout the Class Period, Defendants not only permitted the HFTs to see and detect price and market data not available to other market participants, including price information about the Plaintiffs and other Class Members, Defendants also permitted the HFTs to execute trades based on this same data on terms that guaranteed these HFTs an overwhelming and illegal trading advantage.

117) During the Class Period, the CME and CBOT sold price information to the Plaintiffs and the Class as accurate, instant, *bona-fide* and "real-time" prices and order information, all the while knowing that they had permitted the HFTs to see and act on this price information before Plaintiffs and the Class could act. What Defendants were representing and selling as real-time information was in essence delayed secondhand information. Defendants never disclosed this highly material information to Plaintiffs and the Class.

118) Defendants not only actively concealed their fraudulent practice of selling something as instant real-time information despite it not being so, they went out of their way to make false statements about their price data to the public, journalists, market participants, regulators and the media, all as alleged herein.

119) Plaintiffs and the Class are entitled to actual damages from Defendants based upon Defendants' fraud on the marketplace that caused Plaintiffs and the Class severe financial losses.

Sixth Cause Of Action For Violations Of Sections 1 And 2 Of The Sherman Antitrust Act, 15 U.S.C. §1 *Et Seq.,* ("Sherman Act")
Transaction Prices

120) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

121) In violation of Section 1 of the Sherman Act, Defendants have entered, made, and performed a web of agreements in unreasonable restraint of trade with numerous HFTs and other preferred clients.

122) One of the direct, foreseeable, and continuing effects of the manner in which Defendants have performed these agreements is a manipulation of the prices at which Plaintiffs and the Class have transacted on the CME and CBOT. This manipulation of Plaintiffs' transaction prices is a *per se* violation of Section 1.

123) The manipulation of transaction prices that has been systematically allowed and caused by Defendants' performance of their unreasonable restraint of trade with the HFTs has directly profited the HFTs and thereby incentivized the HFTs to pay more monies to the Defendants pursuant to the agreements in restraint of trade and in order to secure such profits from price manipulation.

124) Plaintiffs do not challenge any government regulations or governmentally delegated powers, if any, to Defendants, specifically including the CME, CME Group, and CBOT.

125) Rather, Plaintiffs challenge only the manner and anticompetitive nature of Defendants' profit making activities. This specifically includes, but is not limited to, the manner in which Defendants have performed in connection with this web of agreements in unreasonable restraint of trade. Such performance, which has included saving costs for Defendants, and generating additional revenues so as to inflate their profits, has unreasonably restrained trade by manipulating the prices at which Plaintiffs and the Class transact. The direct beneficiaries of such pool of manipulated price differentials are the Defendants and HFTs. The direct victims who are entitled to recover their damages are the Plaintiffs and the members of the Class.

126) As a direct result of the foregoing, Plaintiffs and members of the Class have been damaged in their property and are entitled to recover threefold their damages proximately caused by Defendants' violation of Section 1 of the Sherman Act.

Seventh Cause Of Action For Violations Of Section 1 Of The Sherman Act
Commissions and Other Costs of Trading

127) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

128) Plaintiffs do not challenge any government regulations or governmentally delegated powers, if any, to Defendants, specifically including the CME, CME Group, and CBOT.

129) In violation of Section 1 of the Sherman Act, Defendants have also entered, made, and performed a web of agreements in unreasonable restraint of trade with numerous HFTs.

130) The direct, foreseeable, and continuing effects of the manner in which Defendants have undertaken the foregoing has been the provision to HFTs of reduced

commissions and fees for trading, rebates, and incentive payments designed to encourage such HFTs to make trades on the exchanges controlled by Defendants.

131) These cost reductions, rebates, and incentive payments have not been offered or made to Plaintiffs and members of the Class.

132) These reductions in trading costs, rebates, and incentive payments have been made when the trading volume in commodity futures or other derivatives products was extremely high and no pro-competitive justification was served by Defendants' continued performance of such agreements.

133) This course of conduct anti-competitively disadvantaged Plaintiffs and members of the Class in multiple ways, including the burdens of having to pay higher costs to transact and having to transact in a market in which wash trades or other high volume, manipulative trading practices move prices on an absolute level and periodically disconnected price trends and patterns from market news or other legitimate stimuli.

134) Defendants' foregoing conduct should be enjoined to prevent the continuation of such deleterious effects on price sequencing and the pattern of transaction prices, news, or other stimuli.

135) Separately Defendants' foregoing conduct has also produced, incentivized, or added to the manipulation of prices by HFTs as previously alleged herein.

136) As a direct result of the foregoing, Plaintiffs and members of the Class have been damaged in their property (including by paying manipulated prices and also by paying increased commissions, transaction costs and fees), and are entitled to recover threefold their damages proximately caused by Defendants' violation of Section 1 of the Sherman Act.

Eighth Cause Of Action For Violations of The Sherman Act Section 1 and 13(a), 15 U.S.C. §§1 and 13(a)
Rebates

137) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

138) In violation of Sections 1 and 13(a) of the Sherman Act, Defendants have entered, made, and performed a web of agreements in unreasonable restraint of trade with numerous HFTs and to make, have made, and continue to make rebate payments to HFTs.

139) One of the direct, foreseeable, and continuing effects of the manner in which Defendants have performed these agreements is a manipulation of the prices at which Plaintiffs and the Class have transacted on the CME and CBOT. This manipulation of Plaintiffs' transaction prices is a *per se* violation of Section 1.

140) The manipulation of transaction prices that has been systematically allowed and caused by Defendants' performance of their unreasonable restraint of trade and from which the HFTs have directly profited has thereby incentivized the HFTs to pay more monies to Defendants pursuant to the clandestine agreements in restraint of trade and in order to secure such profits from price manipulation.

141) Plaintiffs do not challenge any government regulations or government delegated powers, if any, to the Defendants specifically including the CME, CME Group, and CBOT.

142) Rather, Plaintiffs challenge only Defendants' profit making activities. This specifically includes but is not limited to the manner in which Defendants have performed in connection with this web of agreements in unreasonable restraint of trade.

Such performance, which has included saving costs for Defendants, and generating additional revenues so as to inflate their profits, has unreasonably restrained trade by manipulating the prices at which Plaintiffs and the Class transact. The direct beneficiaries of such pool of manipulated price differentials are the Defendants and HFT's. The direct victims who are entitled to recover their damages are the Plaintiffs and the members of the Class,

143) The transactions alleged herein occurred in interstate commerce, and Defendants unfairly discriminated in price between Plaintiffs and the Class and the Exchange Defendants' preferred HFT clients who wrongfully benefitted thereby.

144) The futures contracts and options that were the subject of these transactions were of the exact same grade and quality and were contracts offered on the exact same terms and conditions in interstate commerce, and the price discrimination exerted by the Defendant Exchanges to the direct detriment of Plaintiffs and the Class had a prohibited effect on competition in violation of The Robinson-Patman Act, Section 2(a) and Section15(a) of the Sherman Act.

145) As a direct result of the foregoing, Plaintiffs and members of the Class have been damaged in their property and are entitled to recover threefold their damages approximately caused by Defendants' violation of Sections 1 and 13(a) of the Sherman Act.

Ninth Cause Of Action For Violation of Section 2 of the Sherman Act
Monopoly, Attempt to Monopolize, Conspiracy to Monopolize

146) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

147) The CME Group operates the largest exchange in the United States in commodity futures, commodity options, and other derivatives. The open interest in the CME contracts is the largest of any exchange on earth. Defendants' agreements in unreasonable restraint of trade entered into and made with the HFTs have increased CME Group's trading, market power, and ability to control prices and restrict output.

148) The HFTs represent large pools of capital. Performing Defendants' agreements in restraint of trade in a manner that provides the price manipulation and cost of trading benefits alleged herein, attracts more such HFTs to transact with the CME Group. This increases the trading in CME Group's products and the CME Group's market share generally in the trading of derivative products and, specifically, in numerous individual products.

149) By diverting monies away from Plaintiffs and the Class to the HFTs in the performance of Defendants' web of agreements with the HFTs, Defendants have increased the CME Group's power to set prices in these markets, *i.e.*, have increased the CME Group's market power and monopoly power in specific products and generally.

150) Indeed, Defendants' performance of these agreements and the preferential results provided to the HFTs constitutes a quasi-barrier to entry by competitors and a competitive advantage for Defendants.

151) Through this web of agreements and the performance thereof, Defendants have monopolized, intended to monopolize, or made agreements that assisted them to monopolize the market for providing derivatives trading in violation of Section 2 of the Sherman Act.

152) As a direct result of the foregoing, Plaintiffs and members of the Class have been damaged in their property and are entitled to recover threefold their damages proximately caused by Defendants' violation of Section 2 of the Sherman Act.

Tenth Cause Of Action For Unjust Enrichment

153) Plaintiffs repeat and reallege each and every allegation contained in the above paragraphs as if fully set forth herein.

154) Defendants financially benefitted from their unlawful acts. These unlawful acts caused Plaintiffs and other members of the Class to suffer injury and monetary loss.

155) As a result of the foregoing, it is unjust and inequitable for Defendants to have enriched themselves in this manner.

156) Each Defendant should pay its own unjust enrichment to Plaintiffs and members of the Class.

157) Plaintiffs and members of the Class are entitled to the establishment of a constructive trust impressed on the benefits to Defendants from their unjust enrichment and inequitable conduct.

JURY DEMAND

158) Plaintiffs demand a jury trial.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs pray for relief and judgment, as follows:

A. Determining that this action is a proper class action as to all claims

alleged herein, appointing Plaintiffs' counsel as counsel for the class and certifying Plaintiffs as class representatives under Rule 23 of the Federal Rules of Civil Procedure;

B. Awarding compensatory damages, including interest, in favor of Plaintiffs and the other members of the Plaintiff Class against all Defendants, jointly and severally, for all damages sustained as a result of Defendants' wrongdoing, in an amount to be proven at trial, including interest thereon;

C. Awarding treble damages on those claims brought under the provisions of the federal antitrust laws;

D. Awarding equitable restitution of investors' monies of which they were defrauded and disgorgement and/or the imposition of a constructive trust on Defendants' ill-gotten gains;

E. Awarding forfeiture in favor of the Plaintiff Class against all Defendants for all illicit fees, commissions and any other compensation paid by Plaintiffs and Plaintiff Class members;

F. Awarding equitable and/or injunctive relief pursuant to 28 U.S.C. §2201(a) in favor of the Plaintiff Class against Defendants and their counsel, agents and all persons acting under, in concert with, or for them, including: (i) an accounting of and the imposition of a constructive trust and/or an asset freeze on Defendants' illicit profits from the conduct detailed herein; (ii) prohibiting HFT traders from engaging in preferential order placement, electronic front-running, rebate arbitrage,

slow-market arbitrage, spamming, spoofing, and/or quote spamming on the Defendants' exchanges; (iii) prohibiting Defendants from charging fees for Defendants' real-time futures market data and refunding fees paid by the Plaintiffs and the Class; and (iv) prohibiting Defendants from allowing HFTs to execute trades based on the non-public order information of the Plaintiffs and the Class; and

G. Awarding such other relief as this Court may deem just and proper.

Dated: Chicago, Illinois
July 22, 2014

LAW OFFICES OF R. TAMARA DE SILVA
Respectfully submitted

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